

or strapping only if the banding or strapping is suitable for hoisting and is strong enough to support the weight of the load.

(d) Additional means of hoisting shall be employed to ensure safe lifting of unitized loads having damaged banding or strapping.

(e) Case hooks shall be used only with cases designed to be hoisted by these hooks.

(f) Loads requiring continuous manual guidance during handling shall be guided by guide ropes (tag lines) that are long enough to control the load.

(g) Intermodal containers shall be handled in accordance with § 1917.71(e).

#### **§ 1917.14 Stacking of cargo and pallets.**

Cargo, pallets and other material stored in tiers shall be stacked in such a manner as to provide stability against sliding and collapse.

#### **§ 1917.15 Coopering.**

Repair and reconditioning of damaged or leaking cargo packaging (coopering) shall be performed so as not to endanger employees.

#### **§ 1917.16 Line handling. (See also § 1917.95(b)).**

(a) In order to provide safe access for handling lines while mooring and unmooring vessels, cargo or material shall not be stowed or vehicles placed where they obstruct the work surface to be used.

(b) When stringpiece or apron width is insufficient for safe footing, grab lines or rails shall be installed on the sides of permanent structures. ("Stringpiece" means a narrow walkway between the water edge of a berth and a shed or other structure.)

#### **§ 1917.17 Railroad facilities.**

(a) Work shall be performed in railcars only if floors of the railcars are in visibly safe condition for the work activity being conducted and equipment being used.

(b) A route shall be established to allow employees to pass to and from places of employment without passing under, over or through railcars, or between cars less than 10 feet (3 m) apart on the same track.

(c) The employer shall direct that no employees remain in railcars after work is concluded.

(d) Railcars shall be chocked or otherwise prevented from moving:

(1) While dockboards or carplates are in position; or

(2) While employees are working within, on or under the railcars or near the tracks at the ends of the cars.

(e) When employees are working in, on, or under a railcar, positive means shall be taken to protect them from exposure to impact from moving railcars.

(f) Before cars are moved, unsecured and overhanging stakes, wire straps, banding and similar objects shall be removed or placed so as not to create hazards.

(g) The employer shall institute all necessary controls during railcar movement to safeguard personnel. If winches or capstans are employed for movement, employees shall stand clear of the hauling rope and shall not stand between the rope and the cars.

(h) Before being opened fully, doors shall be opened slightly to ensure that the load has not shifted during transit. Special precautions shall be taken if the doors being opened are visibly damaged.

(i) If power industrial trucks are used to open freight car doors, the trucks or the railcar doors shall be equipped with door opening attachments. Employees shall stand clear of the railcar doors while they are being opened and closed.

(j) Only railcar door openers or power trucks equipped with door opening attachments shall be used to open jammed doors.

(k) Employees shall not remain in or on gondolas or flat cars when drafts that create overhead, caught-in, caught-between or stuck by hazards are being landed in or on the railcar; end gates, if raised, shall be secured.

(l) Operators of railcar dumps shall have an unrestricted view of dumping operations and shall have emergency means of stopping movement.

(m) Recessed railroad switches shall be enclosed to provide a level surface.

(n) Warning signs shall be posted where doorways open onto tracks, at blind corners and at similar places where vision may be restricted.

(o) Warning signs shall be posted if insufficient clearance for personnel exists between railcars and structures.

**§ 1917.18 Log handling.**

(a) The employer shall ensure that structures (bunks) used to contain logs have rounded corners and rounded structural parts to avoid sling damage.

(b) Two or more binders or equivalently safe means of containment shall remain on logging trucks and railcars to secure logs during movement of the truck or car within the terminal. During unloading, logs shall be prevented from moving while binders are being removed.

(c) Logs shall be hoisted by two slings or by other gear designed for safe hoisting.

(d) Logs placed adjacent to vehicle curbs on the dock shall not be over one tier high unless placed in bunks or so stacked as not to roll or otherwise create a hazard to employees.

(e) Before logs are slung up from the dock, they shall be stably supported to prevent spreading and to allow passage of slings beneath the load. When bunks or similar retaining devices are used, no log shall be higher than the stanchions or retaining members of the device.

**§ 1917.19 Movement of barges and railcars.**

Barges and railcars shall not be moved by cargo runners (running rigging) from vessel cargo booms, cranes or other equipment not suitable for the purpose.

**§ 1917.20 Interference with communications.**

Cargo handling operations shall not be carried on when noise-producing maintenance, construction or repaired work interferes with communication of warnings or instructions.

**§ 1917.21 Open fires.**

Open fires and fires in drums or similar containers are prohibited.

**§ 1917.22 Hazardous cargo.<sup>2</sup> (See § 1917.2(p)).**

(a) Before cargo handling operations begin, the employer shall ascertain whether any hazardous cargo is to be handled and shall determine the nature of the hazard. The employer shall inform employees of the nature of any hazard and any special precautions to be taken to prevent employee exposure, and shall instruct employees to notify him of any leaks or spills.

(b) All hazardous cargo shall be slung and secured so that neither the draft nor individual packages can fall as a result of tipping the draft or slacking of the supporting gear.

(c) If hazardous cargo is spilled or if its packaging leaks, employees shall be removed from the affected area until the employer has ascertained the specific hazards, provided any equipment, clothing and ventilation and fire protection equipment necessary to eliminate or protect against the hazard, and has instructed cleanup employees in a safe method of cleaning up and disposing of a spill and handling and disposing of leaking containers. Actual cleanup or disposal work shall be conducted under the supervision of a designated person.

**§ 1917.23 Hazardous atmospheres and substances. (See § 1917.2(p)).**

(a) *Purpose and scope.* This section covers areas in which the employer is aware that a hazardous atmosphere or substance may exist, except where one or more of the following sections apply: Section 1917.22 *Hazardous cargo*; § 1917.24 *Carbon monoxide*; § 1917.25 *Fumigants, pesticides, insecticides and hazardous preservatives*; § 1917.73 *Menhaden terminals*; § 1917.152 *Welding, cutting, and heating (hot work)*; and § 1917.153 *Spray painting*.

(b) *Determination of hazard.* (1) When the employer is aware that a room, building, vehicle, railcar or other space contains or has contained a hazardous

<sup>2</sup>The Department of Transportation and the United States Coast Guard apply requirements related to handling, storing and transportation of hazardous cargo (see 33 CFR part 126, 46 CFR, 49 CFR).